

**RESPONSE TO PUBLIC COMMENTS ON  
DRAFT MODIFICATION OF PERMIT NO. MA0003891 FOR  
GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS**

On June 3, 2009, Region 1 of the U.S. Environmental Protection Agency (“EPA”) and the Massachusetts Department of Environmental Protection (“MassDEP”) (together, the “Agencies”) released for public notice and comment a draft modification of National Pollutant Discharge Elimination System (“NPDES”) Permit No. MA0003891. The permit had been reissued to the General Electric Company (“GE” or “permittee”) on September 30, 2008, to authorize discharges from its Pittsfield, Massachusetts, facility to Unkamet Brook and the East Branch of the Housatonic River. The public comment period for the draft permit modification ended on July 2, 2009.

Written comments on the draft permit modification were received from:

1. General Electric Co.
2. Connecticut Department of Environmental Protection
3. Citizens for PCB Removal
4. National Marine Fisheries Service

All comments presented in this document have been reproduced verbatim from each comment letter.

In accordance with the provisions of 40 C.F.R. § 124.17, this document presents the Agencies’ responses to comments received on the draft permit modification. After a review of the comments, EPA and MassDEP have decided to issue the final permit modification. As a result of comments, the Agencies have revised certain permit conditions, improved certain analyses and made certain clarifications. These improvements and changes are detailed in this document and reflected in the final permit modification. A summary of the changes made in the final permit modification is presented below. The analyses underlying these changes are explained in the responses to comments that follow.

A copy of the final permit modification may be obtained by sending a written request to the following address:

**United States Environmental Protection Agency, Region 1  
Attn: Brian Pitt  
1 Congress Street, Suite 1100 (CMP)  
Boston, Massachusetts 02114-2023**

Copies of the final permit modification may also be obtained by calling or emailing Brian Pitt, who can be reached at (617) 918-1875. Electronic copies of the final permit modification and these responses to public comments are available at EPA’s web site at [epa.gov/regiona01/npdes/mirantcanal/index.html](http://epa.gov/regiona01/npdes/mirantcanal/index.html).

**Comment from GE**

Page	Part	Comment
1		Page 1 references Attachment A. A revised Attachment A was not included with the draft Permit Modification. A revised Attachment A should be included.
<b>Response:</b> Attachment A includes detailed descriptions of the outfalls authorized by the permit and was inadvertently omitted from the draft permit package. Only minor changes to this attachment were necessary to reflect the modifications to the permit (including the minor modification made on May 15, 2009). The changes include dry weather flow authorizations for outfalls 05A, 05B, 06A, SR05, and deletion of outfalls YD6, YD7, YD8, YD9, and YD14, which have been eliminated. The updated attachment has been included in the final permit modification.		
2	Part I.A.1	Parenthetical “(see BMP 1 in Attachment C)” should be changed to read “(see BMP A in Attachment C)” to include water from other BMP cleaning activities (e.g., oil/water separators).
<b>Response:</b> The requested change has been made. The change makes the parenthetical more comprehensive.		
11	Part I.A.10	There are asterisks following the word “Report” in the Rainfall/Precipitation line item in the table. The asterisks do not appear to reference a footnote and should thus be removed.
<b>Response:</b> The asterisks are typographical errors and have been removed.		
12	Part I. A. 11	TSS and PCB monitoring/reporting in lbs/day (loading) is not possible until flow meter installation (and/or reconfiguration) is complete. Footnote *26 allows for a 6-month schedule, from the effective date of the Permit Modification, to install (reconfigure) flow monitoring equipment. TSS and PCB monitoring and reporting should be consistent with footnote *26 and provide for a monitoring/reporting schedule to begin no later than 6 months from the effective date of the Permit Modification.
<b>Response:</b> The commenter is correct that mass discharges cannot be calculated without flow data, and that footnote *26 allows for a 6-month schedule for installation of flow		

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monitoring equipment at certain outfalls. Therefore, a schedule requiring the submittal of mass discharge data beginning six months from the effective date of the permit has been added to footnote *26. This schedule has been provided for all outfalls subject to footnote *26 (i.e., all outfalls for which flow measurement devices need to be installed), except for outfall 005. For outfall 005, the permit requires that the combined flows from the flow meters at 64T and 64G be used for the first six months after the effective date of the permit.		
13	Part I.A.12	Footnote *25 requires TSS and PCB monitoring/reporting to begin no later than 6 months from the effective date of the permit modification to provide for the installation of additional sampling equipment. However, the paragraph above the table in Part I.A.12 states “All other monitoring shall begin twenty four (24) months from the effective date of this modification.” References to footnote *25 should be removed from Part 1A.12 to be consistent with the dry weather monitoring requirements in Parts I.A.2., I.A.5, I.A.8 of the draft Permit Modification.
<b>Response:</b> The requested change has been made. The schedule for this dry weather discharge should be consistent with the schedule for the other dry weather discharges.		
16	Footnote *13, *14	A reference to Attachment D was made in footnotes *13 and *14. Attachment D was not included with the draft Permit Modification. Attachment D should be included.
<b>Response:</b> Attachment D was included in the final permit issued on September 30, 2008. There were no changes to this attachment proposed in the draft permit modification, so it was not included. The version of Attachment D attached to the September 30, 2008 final permit is therefore the correct version and has not been included as an attachment to the final permit modification.		
16, 17	Footnote *18, *19	A reference to Attachment B was made in footnotes *18 and *19. Attachment B was not included with draft Permit Modification. Attachment B should be included.
<b>Response:</b> Similar to the previous response, Attachment B was not modified, so was not included in the draft permit modification and has not been included in the final permit modification.		
18	Part I.A.14	There appears to be an inconsistency between the first and second sentences of this part. The first sentence authorizes the discharge of uncontaminated

Page	Part	Comment
		groundwater. However, the second sentence prohibits all dry weather discharges (except discharges due solely to fire suppression/testing activities). Groundwater discharge may occur during dry weather periods, which would be prohibited by the second sentence.
<b>Response:</b> There is an inconsistency between the first and second sentences. EPA's intent was to authorize the dry weather discharge of uncontaminated groundwater <u>and</u> fire suppression/testing water, but to require sampling of only dry weather discharges due to groundwater. EPA has clarified this requirement by adding "and water from fire suppression/testing activities" to the authorized discharges in the first sentence, and eliminating the second sentence.		
Pg. 2 of Attachment C	BMP A.2.A	The third bullet requires reasonable best efforts to install continuous flow monitoring equipment at the OWS. A schedule for installing flow monitoring equipment at the oil water separators is set forth by the Parts listed in footnote *26, thus the third bullet should be removed.
<b>Response:</b> The requested change has been made. The schedule in footnote *26 supersedes the more general requirement in Attachment C.		
Pg.4 of Attachment C	B.2	For clarity purposes, the first sentence in note 1 should be revised from "In addition to the activities identified in this table..." to "In addition to the activities identified in Attachment C..."
<b>Response:</b> The requested change makes the requirement clearer and has been made.		
Pg. 5 of Attachment C	Attachment C- C.1.a	The following Parts are missing from the first bullet: I.A.2, I.A.5, I.A.8, and I.A.12.
<b>Response:</b> The requested change corrects an omission in the draft permit modification and has been made.		
<b>Grammatical/Typo Revisions:</b>		
2	Part I.A.1	PCB line item footnotes in table should not be italicized.
<b>Response:</b> The requested change has been made.		
4	Part I.A.3	Oil and Grease units, in the table, should be changed from "lbs.day" to "lbs./day".

Page	Part	Comment
<b>Response:</b> The requested change has been made.		
4	Part I.A.3	The comma following the Rainfall/Precipitation line item footnote *11 in the table should be removed.
<b>Response:</b> The requested change has been made.		
5	Part I.A.4	There are two instances in the first sentence of the paragraph above the table, where spaces are incorrectly inserted. The first instance follows the word “plant”, and the second is at the end of the sentence.
<b>Response:</b> The requested changes have been made.		
Pg. 3 of Attachment C	BMP A.2.B	The word “to” should be inserted after the word “efforts” in the second bullet on this page.
<b>Response:</b> The requested change has been made.		
Pg. 4 of Attachment C	B.1	There is a double period after the second bullet on this page. One period should be deleted.
<b>Response:</b> The requested change has been made.		
Pg. 6 of Attachment C	Attachment C-C.1.b	The extra space after the forth bullet in this section should be removed.
<b>Response:</b> The requested change has been made.		

### **Comments from Connecticut Department of Environmental Protection**

**Comment 1:** Thank you for the opportunity to provide comments on the proposed revisions to the National Pollutant Discharge Elimination System (NPDES) permit for the General Electric Company facility in Pittsfield, Massachusetts. The Connecticut Department of Environmental Protection (CT DEP) supports the efforts of the US Environmental Protection Agency and the Department of Environmental Protection of the Commonwealth of Massachusetts to regulate discharges from the General Electric facility. However, the revised permit, as proposed, will be insufficient to insure that the

discharges from the facility will achieve water quality standards established under Section 303 of the Clean Water Act, as required by 40 CFR 122.44(d). Given that the Housatonic River in both Massachusetts and Connecticut has been substantially impacted by past and present releases from this facility, the NPDES permit for this facility must impose stringent limitations and requirements to allow attainment of water quality standards and goals within Massachusetts and Connecticut.

As stated in the fact sheet that accompanies the revised permit, EPA believes that the revised permit focuses on steps to work towards the elimination of PCBs from the wet and dry weather discharges from the facility. CT DEP concurs that source elimination is needed at the facility with the goal of eliminating PCBs from the discharges emanating from the facility. The revised permit, however, does not include substantive requirements to identify and eliminate sources of PCBs to the discharges. Since source elimination is identified as the driving force behind the proposed changes to the permit, specific requirements to identify and eliminate sources of PCBs in the discharge must be included in addition to the current requirements which focus on optimization of the treatment system for discharge 64G, general non-water quality based best management practices for controlling stormwater, and flow reductions.

**Response 1:** The Agencies respectfully disagree with the assertion that the permit modification will fail to ensure compliance with water quality standards. The Agencies' legal, technical and policy justifications for the permit modification have been set forth in detail on page 4 through 11 of the fact sheet accompanying the draft permit. This discussion includes an analysis of why the permit modification, which opts for narrative rather than numeric effluent limitations on dry weather discharges (64G excepted), is sufficiently stringent to comply with the Clean Water Act and its implementing regulations. While CT DEP clearly would have preferred a different permitting approach (*i.e.*, one that imposed numeric PCB limits on all discharges from the facility), there is nothing in its comments to demonstrate why it believes the Agencies' approach is erroneous and why the permit modification fails to comply with the statute or regulations. The Agencies have discerned no reason to depart from the analysis originally set forth in the fact sheet regarding the ability of the permit modification to comply with all applicable water quality standards.

The Agencies also disagree that the permit lacks substantive requirements to identify and eliminate sources of PCBs. To the contrary, the permit modification imposes the following requirements with respect to PCB source identification:

- GE shall design and implement a “baseline” monitoring program to identify the presence and potential origin of dry weather flows that may discharge through GE outfalls 005 (excluding 64G GWTF), 05A, 006, and 009. Information obtained from this program (general understanding regarding the location, origin, nature, and quantity of dry weather flow) will support subsequent evaluations concerning possible dry weather flow reduction/elimination measures.
- The “baseline” program shall be designed based on review of available mapping

for the GE facility and adjacent areas; the results of the BMP cleaning activities described in Part A of this attachment; available information related to seasonal groundwater elevations and other site considerations; and an initial field reconnaissance of accessible areas within and along the perimeter of the GE facility (e.g., manholes (MHs) and catch basins (CBs)).

- At a minimum, the “baseline” program shall include a monthly visual inspection of numerous MHs, CBs, pipe sections, and other structures (collectively, “structures”) located within, along the perimeter, and/or potentially hydraulically connected to the drainage basins associated with outfalls 005 (excluding 64G GWTF), 05A, 006, and 009. Each structure will be inspected for evidence of dry weather flow. If such flows are observed, qualitative information related to the flow (e.g., potential origin, estimated flow quantity, visual observations, etc.) will be recorded. To the extent practicable, the rate of observed flow will be estimated.
- During implementation of the program, the results of the “baseline” monitoring program will be reviewed, and modifications to the ongoing program will be implemented if warranted. Modifications (if any) will be identified consistent with the objectives of the program (i.e., to identify the presence and possible origin of dry weather flows).
- To account for the potential intermittent and/or seasonal occurrences of dry weather flows (e.g., infiltration of groundwater during seasonal high water table conditions), the “baseline” monitoring program shall be conducted over a several month timeframe. The duration of the “baseline” monitoring program shall not exceed 12 months, unless specific Agency approval is provided for a longer duration.
- The proposed “baseline” monitoring plan shall be provided to the Agencies for review and comment within 30 days of the effective date of the permit modification. The proposal shall identify specific timeframes for the implementation and completion of “baseline” program, including the submittal of a semi-annual interim status report(s) and a final summary report. The final summary report shall also include GE’s initial evaluations and proposals (if any) for additional monitoring (if warranted) and/or dry weather flow reduction/elimination measures.

#### And implementation:

- The results of the BMP activities will be evaluated to determine the need for (and if necessary, the scope of) flow reduction/elimination measures (“flow reduction measures”). The evaluation of possible flow reduction measures will consider the specific circumstances related to each dry weather flow, including the origin/location of the observed flow; frequency, rate, and duration of flow; length and size of affected piping; technical and cost feasibility of potential measures, etc.
- Potential flow reduction measures for dry weather flows that are not related to GE shall be discussed with the City of Pittsfield and Agencies as appropriate. Reasonable best efforts, in consultation with the City, shall be applied to reduce and minimize, or eliminate, offsite flow contributions.

- For each dry weather flow that is identified for flow reduction measures, one or more of the following measures shall be considered and selected based on the evaluations described above: pipeline cleaning and inspection, pipeline abandonment, pipeline replacement, pipeline rehabilitation (e.g., sliplining or grouting), and re-routing of flow. In addition, depending on the nature of the dry

The requirements above are clear, enforceable obligations of the permittee, will entail significant time and expense, and are logically designed to achieve the objective of PCB source elimination from point sources. As such, they would appear on their face to qualify as “specific requirements to identify and eliminate sources of PCBs in the discharge.” While CT DEP may have preferred more specific permit conditions—and it is unclear from the comment what these may be—the Agencies explained in the fact sheet that a flexible approach that allowed the permittee to iterate its flow elimination/reduction efforts (within the timeframes specified in the permit) was warranted given the particular facts of this case.<sup>1</sup>

**Comment 2:** Additionally, Attachment C of the permit states that if source elimination is not possible, the goal would be to reduce the level of PCBs in the discharges to a level below which no reasonable potential to cause or contribute to an excursion above water quality standards exist. It is our contention that it is not possible to make this demonstration since water quality within the Housatonic River is impaired and the waterbody is identified as such on the impaired waters lists prepared by both Massachusetts and Connecticut pursuant to Section 303(d) of the Federal Clean Water Act. As long as such impairment persists, it will not be possible to demonstrate that the discharge of any amount of PCBs to the environment does not cause or contribute to such impairment.

**Response:** Given the existing impairment in the receiving waters and the persistent, adverse environmental impacts of PCBs, the Agencies believe that establishing the narrative PCB effluent limitation based on a reasonable potential to cause or contribute to a violation of water quality standards is both conservative and reasonable. If the permittee is unable to entirely eliminate dry weather flows, EPA will assess whether reasonable potential exists in accordance with applicable technical guidance for water quality-based toxics control given the record before it at that time.

**Comment 3:** For several discharges, with the exception of requirements to monitor discharge flow, the permit suspends monitoring requirements for all parameters,

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<sup>1</sup> “Dry weather flow from outfalls 05A, 64T, 006 and 009 presents unique challenges at the Pittsfield facility because the flow is not associated with active manufacturing, is episodic in nature, appears to be consistently low in volume, and in certain cases appears to originate within area(s)/source(s) over which GE may not have meaningful control (e.g., City of Pittsfield inflow).” Fact Sheet at 7. Because there is such a wide range of possibilities related to the occurrence, nature, frequency, and extent of dry weather flows, a detailed, regimented plan for addressing such flows is neither feasible nor desirable at this stage in the permitting process.



including PCBs, for a period of 24 months. Monitoring of PCBs should not be suspended for any time period.

**Response 3:** During the first 24 months the permit is in effect, the permittee will be focusing on the elimination of the dry weather discharges. Any PCB data collected during this period would be of little use in the ultimate decision of whether the discharge cause or contributes to an exceedance of water quality standards, given that it would reflect the quality of the discharge before the implementation of the BMPs, when what is of primary interest is the quality of the discharge after the implementation of the BMPs. The Agencies would also note that the permittee is required to routinely measure the dry weather flow for these discharges, which will provide meaningful information on the progress of the permittee in eliminating the discharges.

**Comment 4:** All discharges, including both dry and wet weather flows, should be regulated using water quality based permit limits. With the exception of discharge 64G, water quality based limits are not applied to any of the discharges from the facility.

**Response 4:** All dry weather flows from the facility are subject to water quality-based effluent limitations. In some cases, such as 64G, these are in the form of numeric limits, while in others they are in the form of narrative limits. *See* CWA § 502(11) (defining effluent limitation as “any restriction” on quantities, rates and concentrations of constituents discharged from point sources); 40 C.F.R. § 122.44(d) (obligating the permitting authority to include “any requirements” necessary to achieve water quality standards”); *See Defenders of Wildlife v. Browner*, 191 F.3d 1159 (9th Cir. 1999), *aff’g on other grounds In re Ariz. Mun. Storm Water NPDES Permits*, 7 E.A.D. 646, 658-59 (EAB 1988) (Permits need not contain numeric limitations to ensure strict compliance with state water quality standards). The Agencies believe that the narrative effluent limitations associated with the dry weather discharges are as stringent as the numeric limitations applied to outfall 64G. Indeed, such narrative limitations require either elimination of PCBs altogether or reduction below the reasonable potential threshold—a standard that CT DEP itself asserts will not be possible to meet.

Wet weather discharge effluent limitations are outside the scope of this modification.

**Comment 5:** The permit should require evaluation of treatment options for all discharges which have the potential to contain PCBs.

**Response 5:** When writing NPDES permits, EPA does not mandate particular technologies to achieve water quality- or technology-based effluent limitations. Congress intended to give the discharger as much flexibility as possible in choosing his mode of compliance. *See* Natural Resources Defense Council, Inc. v. Costle, 568 F.2d 1369, 1380 (D.C. Cir. 1977); *see, e.g.,* H. Rep. No. 92-911, 92d Cong., 2d Sess. 107, reprinted in Legislative History at 794.

## **Comments from Citizens For PCB Removal**

As our name implies, and as we have always done, we are commenting on this document as non-scientist citizens, as laypeople, but with a more in-depth knowledge of the General Electric PCB-, and other components- contaminated site than the average Berkshire County resident, due to more than 12 years of personal, hands-on involvement in this Issue.

After much internal discussion, and an informal meeting with EPA officials (Thank You!), we are somewhat pleased with the proposed resolution of this dispute. It certainly is a vast improvement over the 1998 NPDES permit for this site. One of our fundamental and ongoing concerns has involved the continuous recontamination of the Housatonic River and surrounding neighborhoods from PCBs and other contaminants from GE-owned property, City of Pittsfield property, including Silver Lake, and the PED A property. By capping/plugging some of the crucial outflows from these areas that then drain directly into the River, or into the City storm system which ultimately ends up in the River, any PCB and other highly toxic pollutants generated at GE's Plant sites will not have a *direct* drainage route to the River. However, we are still very concerned that these toxins will still find their way to the River via other routes, including groundwater seepage especially along capped piping beds, surface runoff, and flood events. We named our Group very carefully. We have always stood for **the removal**, or detoxification, of PCBs – and other highly toxic contaminants at this Site; not the encapsulation, containment or "capping" of them, leaving them in the environment to do further damage and become a problem for future generations. It is general knowledge that this industrial site was -and still is - highly, deeply, grossly contaminated with a variety of exceedingly toxic materials. We are still very much concerned about the levels of contamination at the Site and the potential for further problems of exposure to the environment, and thus the humans and other living creatures within that environment. Our concern centers on the health and well-being of these living inhabitants and the growing body of knowledge of the damage that has been done, - and is still being done - from these toxins. If the easily attainable outlets of contaminant flow are blocked, how will we know if they are still being leached from the site, and from exactly what source? Enclosed/attached is a recent (May 28, 2009) article from WebMD regarding medical research on the growing issue of human liver damage and disease, including liver cancer of "no known" cause. While it does not name PCB's specifically, it does name the group of chemicals to which PCB's and the other known site contaminants are similar, linked or related. It states that even the previously thought "low" levels of toxins from our environment that most of us have in our bodies at present may very well be cause for significant health risks and effects not previously suspected. If these levels are affecting humans, then they most certainly must be affecting the living organisms in the River and surrounding areas. This gives new meaning to so-called "safe" levels of PCBs and other dangerous chemicals.

Therefore, we ask that EPA, DEP and all the Environmental Groups continue to hold General Electric to the task of **truly cleaning up** their mess, and to set the most highly stringent standards for the detection and removal of continuing sources of contaminants

at this site as is humanly possible. We call for further, diligent testing of the Site, especially for **all** the known or suspected substances used at this site, and to continuously and vigilantly monitor the entire Site (as defined in the Consent Decree), the River and the surrounding areas for *each and every one* of these toxic substances. And we continue to press EPA and DEP to consider, investigate and evaluate using pilot studies locally, the cutting edge technologies that safely destroy or detoxify PCB's and all the other contaminants found at this site – including previously declared "cleaned" areas - to the point that long term monitoring will not be necessary and future generations can enjoy their environs without risk or fear.

**Response:** As detailed in the fact sheet accompanying the original draft permit, the Agencies concur that PCBs pose a significant environmental threat. Moreover, the Agencies agree that efforts to control their impacts can be complicated by the tendency of PCBs to persist and migrate through the environment. The Agencies are endeavoring to address PCBs within their statutory and regulatory authorities. In issuing a permit modification entailing the potential elimination of point source PCB discharges during dry weather, the Agencies were mindful of potential secondary impacts. Still, the Agencies regarded the trade-off between a certain, direct discharge to the river (i.e., as a result of eliminating dry weather flows) and a possible, indirect impact on the river (i.e., as a result of redirected dry weather flows finding their way to the river via ground water or soil) as reasonable.

The Agencies agree that a well-designed, comprehensive monitoring regime is a key component of achieving designated uses in the receiving waters. For this reason, the permit modification includes effluent monitoring, as well as both dry weather and wet weather ambient monitoring requirements to assess the effectiveness of the permit.

Note that the Agencies have concluded that there is an opportunity for synergy between dry weather/wet weather pollution control measures and believes that efforts to eliminate/reduce dry weather flows will likely result in cleaner storm water effluent discharging from the site. While the main purpose of the dry weather flow elimination/reduction requirements that have been added to the permit is to lessen dry weather water quality impacts, the investigations and activities required to achieve this result will also mitigate storm water impacts. Ground water infiltration and its associated contaminants are components of wet weather flow as well as dry weather flow. Accordingly, the elimination of groundwater infiltration will reduce wet weather flows and improve wet weather flow quality. Similarly, abandonment and plugging of unnecessary storm drains will reduce wet weather discharges and improve storm water quality by allowing wet weather treatment units to operate more efficiently.

### **Comments from the National Marine Fisheries Service**

This is in response to Public Notice MA-028-09 dated June 3, 2009 regarding a proposed National Pollutant Discharge Elimination System (NPDES) permit for General Electric Company, located in Pittsfield, Massachusetts. The receiving waters for the discharge is the Housatonic River (East Branch) and the Unkamet Brook. These comments are

offered by the Protected Resource Division of NOAA's National Marine Fisheries Service (NMFS).

While several species of listed whales and sea turtles occur seasonally in waters off the Massachusetts coast and populations of the federally endangered shortnose sturgeon occur in the Connecticut and Merrimack Rivers, no listed species are known to occur in the Housatonic River (East Branch) and the Unkamet Brook. As such, no further coordination with NMFS PRD is necessary. Should you have any questions regarding these comments, please contact Danielle Palmer at (978) 282-8468.

**Response:** The comment requires no changes to the final permit modification.